

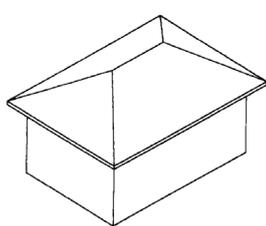
Roofing, Gutters & Downpipes

Roofs are an important part of heritage buildings. They are major visual elements on Victorian and Edwardian houses and contribute significantly to the attractive appearance of a building.

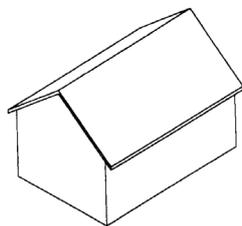
Like all building fabric, roofs need to be maintained to work efficiently. This can range from minor repairs through to major restoration work and entire roof re-cladding. This fact sheet sets out simple guidelines to assist in this process.

Types of Roofs

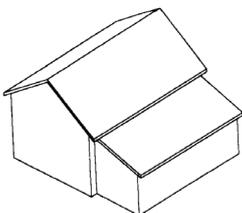
The most common roof forms on Colonial, Victorian and Edwardian buildings were gable roofs and hipped roofs.



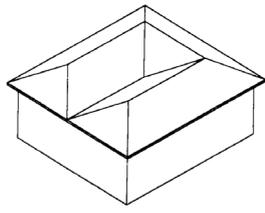
Hipped roof



Gable roof



Gable and lean to



Double hipped (M)

The main roof of a heritage building was typically configured as one of these, often with a simple lean-to on the rear over service areas and a verandah on the front.

Original Roof Design

It is important when working with a heritage roof to understand what is the original main roof and any other original parts. The starting point is to determine what the significant original roof is, and what may be later non-original changes or additions.

It is important to maintain the original roof design wherever possible, as this maintains the historical integrity of the building.

Materials

Many heritage buildings are clad in galvanised corrugated roofing, which originally came in 6ft lengths. These sheets eventually rust at the laps and joints and when used with a low pitch. Roofs can be restored and painted to lengthen their life; however it is more common to replace the roof sheeting.

The most appropriate material to use is traditional galvanised corrugated sheet steel. There are two types available; normal galvanised sheet steel (Z450), or double smelted galvanised steel (Z600). This has a thicker coating, lasts longer and is as close to the product that was used over 100 years ago that is available today.

Colorbond is a popular choice and is also available in a range of appropriate colours.

Surfmist	Evening Haze	Shale Grey	Classic Cream	Dune
Windspray	Pale Eucalypt	Sandbank	Paperbark	Bushland
Ironstone	Wilderness	Jasper	Headland	Woodland Grey
Deep Ocean	Cottage Green	Loft	Manor Red	Monument

Zincalume, a modern material where the zinc used in traditional galvanising is mixed with aluminium, is not appropriate as it does not dull off and has a smoother texture than galvanised steel.

Standard modern corrugated steel roofing typically comes with a 76x16mm corrugation, however there is now a 76x21mm corrugation available, which is deeper and a closer match to the early corrugated iron from the Victorian/Edwardian era. While marginally more expensive, this is a better choice for its look and strength.



New deeper profile roofing



Standard corrugated roofing

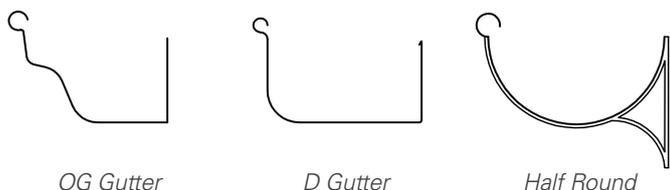
While metal roofing was originally fixed with metal roofing nails, which will do a good job if used properly, conformity with contemporary standards and warranties means that self-drilling Tek-screws with neoprene washers are now used almost exclusively.

Not all heritage roofs are clad with corrugated steel, so it is important to understand and respect the original roof cladding material and to replace this with the same matching material if possible. Other materials include slate, terracotta tiles and zinc sheets.

Gutters

The edges of roofs are typically finished with gutters. The most commonly used gutter type in the Victorian and Edwardian period was OG profile, with half round gutters seen on rare occasions.

The OG gutters available today most closely match traditional gutters commonly available in the late 1800s, whereas half round gutters available now are modern interpretations of older gutters.



D gutters were introduced with the Californian Bungalow style, so became common from the 1920s. These should be used on houses built after 1920 unless evidence of a different style of gutter exists.

Gutter falls were typically set up with timber scotias under the gutters. While other means are now employed to set out correct falls, timber scotias still form an important part of the presentation of a historic gutter.

Downpipes

These were usually round metal with flat metal straps, although on some grander mansions and institutional buildings, square downpipes were also used.

Joints and angles in gutters and downpipes were traditionally soldered. Today only galvanised gutters and downpipes can be soldered, whereas Colorbond needs to be riveted and siliconed.

PVC downpipes should be avoided as the angles and joints do not complement traditional buildings.

Roof Timbers and Decoration

Fascias and barge boards form the edges of roofs and should ideally be repaired and restored to match the design, size and profile of the original.

Timber finials were often used at the apex of gables, particularly at the front of buildings in the late Victorian and Edwardian eras. Being timber, they have a limited life and are often removed when they deteriorate.

Finials however are important decorative elements and should be restored wherever possible. They can make a big visual difference to the attractiveness of buildings.

Chimney Flashings

It is important to maintain the original stepped flashing to chimneys when roofs are re-clad. These were originally done in lead and they often still exist on the chimney, as lead has a very long life.

If so, they should simply be retained and re-used. If not, new lead or a lead alloy should be used. Inappropriate flashing would be a modern Colorbond single piece flashing cut into the chimney brickwork, rather than following the joint lines.

Cappings and Flashings

Ridge cappings should be the same material as the roofing and be the rolled-type capping and not the folded-type capping. They should also be scribed to the corrugated roofing below.

Verandahs

Verandah roofs form part of the overall roof system of a heritage house. As a verandah is quite a complex element, it is dealt with separately in an accompanying Heritage Buildings Fact Sheet.

Approvals

Re-roofing of a heritage place is described as 'development' in the Development Act, 1993 and therefore requires a Development Application. This only applies for a Local or State Heritage Place. Contributory Items or general properties within Historic Conservation Zones do not require Council approval.

Further Reading

- *Heritage SA – Early Roofing and Roof Materials in South Australia* (available online)